

# STATE OF COLORADO Department of Natural Resources

ORDER					· IMPORTANT ·			
Number:	POGG1 PDAA	2017000	00334		The order number and line		•	
Date: 08/16/16			invoices, packing slips, cartons and correspondence					
Description	ı <b>:</b>				BILL TO			
pdaa5000 R	emote cloud seed	er for Gu	ınnison Ri	ver	COLORADO WATER BOARD CONSERVATION			
Effective Da	ate:	Expiratio	n Date:		1313 SHERMAN STREET,	ROOM 718		
BUYER					DENVER, CO 80203			
Buyer:		_			SHIP TO			
Email:					COLORADO WATER BOA	ARD CONSERV	ATION	
VENDOR					1313 SHERMAN STREET,	ROOM 718		
UPPER GU	NNISON RIVER	WATER	}		DENVER, CO 80203			
210 W SPE	NCER AVE				SHIPPING INSTRUCTIONS			
STE B					Delivery/Install Date:			
GUNNISO:	N, CO 81230-254	4			F.O.B:			
Contact: .					VENDOR INSTRUCTION	NS:		
	706416065							
		0.1	77077		TI 1: 0	T . 10 .	MODOD	
Line Item	Commodity/Iter	n Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.	
1	G1000			0	0.00	\$25,000.00		
Description: pdaa5000 Remote cloud seeder for Gunnison River								
Service From	m: 08/16/16	Servi	ce To: 06/	30/17				
Line Item	Commodity/Iter	n Code	UOM	QTY	<b>Unit Cost</b>	<b>Total Cost</b>	MSDS Req.	
2	G1000			0	0.00	\$27,642.00		
Description	i: pdaa5000 Remo	ote cloud	seeder for	Gunniso	n River			
Service From	m: 08/16/16	Servi	ce To: 06/	30/17				
TERMS AND CONDITIONS								
https://www.colorado.gov/osc/purchase-order-terms-conditions								
DOCUMENT TOTAL = \$52,642.00								

## Exhibit A

# **Statement of Work Date: December 30, 2015**

### WATER ACTIVITY NAME – Remote Cloud Seeder for Upper Gunnison

**GRANT RECIPIENT – Upper Gunnison Cloudseeding Program** 

FUNDING SOURCE - \$35,000 Lower Basin States, \$5,000 UG Stakeholders & \$25,000 GBRT (requested)

#### INTRODUCTION AND BACKGROUND

The goal of this project is to purchase, locate, and have in operation by November of 2016, a remotely-controlled cloud seeder constructed by Idaho Power Company (IPC). The model available to purchase is called the RCNG14 (Remote Cloud Nuclei Generator – design revised in 2014). The RCNG14 will join the fleet of 23 other cloud seeders already in use by the Gunnison conduct wintertime cloud seeding operations targeting the Upper Gunnison basin and other surrounding high terrain in Western Colorado. Background: Cloud seeding has been conducted in the Upper Gunnison basin since 2004.

#### **OBJECTIVES**

- 1) Locate the RCNG14 in a place that will allow it to effectively seed winter storms and increase snowpack levels in the Upper Gunnison basin.
- 2) Get more water in our reservoirs and rivers.
- 3) Utilize a new vendor for remote cloud seeders who can make an equally reliable product at roughly half the cost.
- 4) Set a precedent where Colorado programs are responsible for maintaining their own generators and eliminate the costly maintenance contracts with out-of-state agencies.

#### **TASKS**

Provide a detailed description of each task using the following format

TASK 1 – Procurement of the RCNG14

<u>Description of Task-</u>Once IPC has finished building the RCNG14, they will schedule a delivery date with UGRWCD.

TASK 2 – Delivery, Training, and Setup of the RCNG14

<u>Description of Task</u>: The IPC will\_deliver the generator and all supporting hardware and documentation. The IPC will conduct a two-day seminar including setup and operation for the

UGRWCD; other entities conducting cloud seeding programs in Colorado will also be invited to this training as the RCNG14 will be the second of its kind in the state.

# **TASK 3** – Commencement of Operation of the RCNG14

<u>Description of Task UGRWCD</u> will be responsible for setting up a contract with RigNet communication services for the satellite service which is required to communicate and monitor the generator. A maintenance kit must also be purchased from IPC. Once the RCNG14 is set up, the UGRWCD is trained on how to run it, and we can communicate with it, it should be ready to seed storms. Our permit allows us to seed storms that meet the seeding criteria after November 1.

<u>Deliverable:</u> The CWCB will get a final report detailing the process and showing pictures of RCNG14 in its location. Although it is not anticipated, should this project run longer than 6 months, the CWCB will get a progress report detailing where we're at in the process and what is causing any delays.

#### REPORTING AND FINAL DELIVERABLE

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the statement of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

# **BUDGET**

Provide a detailed budget by task including number of hours and rates for labor and unit costs for other direct costs (i.e. mileage, \$/unit of material for construction, etc.). A detailed and perfectly balanced budget that shows all costs is required for the State's contracting and purchase order processes. Sample budget tables are provided below. Please note that these budget tables are examples and will need to be adapted to fit each individual application. Tasks should correspond to the tasks described above.

Total Costs				
			Matching Funds	
	Labor	Other Direct Costs	(If Applicable)	Total Project Costs
Task 1 - Procurement		35,000	10,000	35,000
Task 2 – Delivery, Training, &		15,000	15,000	15,000
Set-Up				
Task 3- Maintenance Kit		10,000	10,000	10,000
In-Kind Contributions	3209.60	565.00		3,774.60
Total Costs:				63,774.60

Other Direct Costs					
Item:	Cloud	Maintenance	Delivery &		Total
	Seeder	Kit	Training		
			(covered by		
			State Cloud		
			Seeding		
			Program)		
	27.000				27.000
Task 1 -	35,000				35,000
Procurement					
Task 2 – Delivery			15,000		15,000
& Trng					
Task 3-		10,000			10,000
Maintenance Kit					
Total Cost:	35,000	10,000	15,000		60,000

#### **SCHEDULE:**

Task	Start Date	Finish Date	
1-Procurement	Upon NTP	NTP + 60 days	
2 Delivery, Training, &	September 1, 2016	October 10, 2016	
Set-Up	_		
3Commencement of	November 1, 2016		
Operation			

NTP = Notice to Proceed

#### **PAYMENT**

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.